

Some results on preconditioned modified accelerated overrelaxation method

Authors : Guangbin Wang, Deyu Sun, Fuping Tan

Abstract : In this paper, we present new preconditioned modified accelerated overrelaxation (MAOR) method for solving linear systems. We compare the spectral radii of the iteration matrices of the preconditioned and the original methods. The comparison results show that the preconditioned MAOR method converges faster than the MAOR method whenever the MAOR method is convergent. Finally, we give one numerical example to confirm our theoretical results.

Keywords : preconditioned; MAOR method; linear system; convergence; comparison

Conference Title : ICEP 2014 : International Conference on Electronic Publications

Conference Location : journal city, WASET

Conference Dates : November 23-23, 2014